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Sequence Listing was accepted.

If you need help call the Patent Electronic Business Center at (866)  
217-9197 (toll free).

Reviewer: Durreshwar Anjum

Timestamp: [year=2008; month=11; day=10; hr=14; min=48; sec=3; ms=555; ]

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Application No: 10082973 Version No: 2.0

**Input Set:****Output Set:**

**Started:** 2008-10-16 17:49:51.453  
**Finished:** 2008-10-16 17:49:53.093  
**Elapsed:** 0 hr(s) 0 min(s) 1 sec(s) 640 ms  
**Total Warnings:** 34  
**Total Errors:** 0  
**No. of SeqIDs Defined:** 54  
**Actual SeqID Count:** 54

Error code	Error Description
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W 213	Artificial or Unknown found in <213> in SEQ ID (2)
W 213	Artificial or Unknown found in <213> in SEQ ID (3)
W 213	Artificial or Unknown found in <213> in SEQ ID (4)
W 213	Artificial or Unknown found in <213> in SEQ ID (5)
W 213	Artificial or Unknown found in <213> in SEQ ID (6)
W 213	Artificial or Unknown found in <213> in SEQ ID (7)
W 402	Undefined organism found in <213> in SEQ ID (8)
W 402	Undefined organism found in <213> in SEQ ID (9)
W 402	Undefined organism found in <213> in SEQ ID (10)
W 402	Undefined organism found in <213> in SEQ ID (11)
W 402	Undefined organism found in <213> in SEQ ID (12)
W 213	Artificial or Unknown found in <213> in SEQ ID (18)
W 402	Undefined organism found in <213> in SEQ ID (20)
W 402	Undefined organism found in <213> in SEQ ID (21)
W 402	Undefined organism found in <213> in SEQ ID (22)
W 213	Artificial or Unknown found in <213> in SEQ ID (37)
W 213	Artificial or Unknown found in <213> in SEQ ID (38)
W 213	Artificial or Unknown found in <213> in SEQ ID (39)
W 213	Artificial or Unknown found in <213> in SEQ ID (40)

**Input Set:**

**Output Set:**

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Error code	Error Description
W 213	Artificial or Unknown found in <213> in SEQ ID (41)
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W 213	Artificial or Unknown found in <213> in SEQ ID (43)
W 213	Artificial or Unknown found in <213> in SEQ ID (44)
W 213	Artificial or Unknown found in <213> in SEQ ID (45)
W 213	Artificial or Unknown found in <213> in SEQ ID (46)
W 213	Artificial or Unknown found in <213> in SEQ ID (47)
W 213	Artificial or Unknown found in <213> in SEQ ID (48) This error has occurred more than 20 times, will not be displayed

# SEQUENCE LISTING

<110> Norris, James S.  
 Clawson, Gary A.  
 Schmidt, Michael G.  
 Hoel, Brian D.  
 Pan, Wei-Hua  
 Dolan, Joseph W.

<120> TISSUE-SPECIFIC AND TARGET RNA-SPECIFIC RIBOZYMES

<130> 14017-0004002

<140> 10082973

<141> 2008-10-16

<150> 09/338,942

<151> 1999-06-24

<150> 60/090,560

<151> 1998-06-24

<150> 60/096,502

<151> 1998-08-14

<160> 54

<170> FastSEQ for Windows Version 4.0

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<211> 492

<212> DNA

<213> Artificial Sequence

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<223> ARN promoter

<400> 1

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gatecggcggc gtcgggtgccg gcggccgggt ctccgcctg ctcggcggtg cgggtccgtg 180
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gttgtttgac gcaagtcact gattggaaac gccatcggcc tgtcagaaat ggtcgttgcc 420
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<211> 1113

<212> DNA

<213> Artificial Sequence

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<223> PROC promoter

<400> 2

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ggtggcaggc cggcggagag gtgcagggtc gaagcgcctt gtttggaact gaaggcagc 180
agctcggtaa tatccatggg actccccaat tacaagcaag caggtagaat gccgccaaag 240
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gtcctgcgcc agacgcggaa cctcgacact ggaacaggaa gatggccatc gaggccggcg 360
gtttcgaggg cgtcgagccg acgccgaccg cacttccata gggcgaggt aatgtccacg 420
atagcagaga atattgcaaa ggttgccggc cgcattccgt aggcagcgca agctgcgggg 480
cgcgatccgg ccacggtcgg cctgctcgcc gtgagcaaga ccaagccgc cgccgcggtg 540
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<211> 66

<212> DNA

<213> Artificial Sequence

<220>

<223> ARC promoter

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tgtgag 66
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<211> 685

<212> DNA

<213> Artificial Sequence

<220>

<223> UPCM2 cassette sequence

<400> 4

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acgatgacat tctgctgacc agattcacgg tcagcagaat gtcacgtcg gttccaggat 180
ccggctgcta acaaagcccg aaaggaagct gaggttgctg ctgccaccgc tgagcaataa 240
ctagcataac cccttggggc ctctaaacgg gtcttgaggg gttttttgct gaaaggagga 300
actatatccg gatatccgc aagaggcccg gcagtaccgg cataaccaag cctatgccta 360
cagcatccag ggtgacggtg ccgaggatga cgatgagcgc attgttagat ttcatacacg 420
gtgcctgact gcgttagcaa tttaactgtg ataaactacc gcattaaagc ttatcgatga 480
taagctgtca aacatgagaa ttcggcgat acgccgaatt tcaagggtct gcgcaacgac 540
gacgatgagg taccacatcg tcgtcgttgc gactgatga ggccgtgagg ccgaaaccct 600
tgacgcgtaa aaaaaaccg ccccgccggg ttttttacc ttcctatgcg gccgctctag 660
tcgagggggg gccgcgtaga actag 685
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<213> Artificial Sequence

<220>  
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gataacaatt cacaagctta tcgataccgt cgacctcgag ctttgaacc ctgatgagtc 120  
cgtgaggacg aaacgatgac attctgctga ccagattcac ggtcagcaga atgtcatcgt 180  
cggttccagg atccggctgc taacaaagcc cgaaaggaag ctgagttggc tgctgccacc 240  
gctgagcaat aactagcata accccttggg gcctctaaac gggctctgag gggttttttg 300  
ctgaaaggag gaactatatc cggatatccc gcaagaggcc cggcagtacc ggcataacca 360  
agcctatgcc tacagcatcc agggtgacgg tgccgaggat gacgatgagc gcattgttag 420  
atttcataca cggtgccctga ctgcgttagc aatttaactg tgataaacta ccgcattaaa 480  
gcttatcgat gataagctgt caaacatgag aattcggcgt atacgccgaa tttcaagggt 540  
ctgcgcaacg acgacgatga ggtaccacat cgtcgtcgtt gcgcactgat gaggccgtga 600  
ggccgaaacc cttgacgcgt aaaaaaacc cgccccggcg gggttttttac gcgttcctat 660  
gcggccgctc tag 673

<210> 6  
<211> 14  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> primer

<400> 6  
agctcgagct caga 14

<210> 7  
<211> 17  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> primer

<400> 7  
tcgacggatc tagatcc 17

<210> 8  
<211> 166  
<212> DNA  
<213> E. coli

<400> 8  
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aaacatctca ctgatgagtc cgtgaggacg aaacattacg aaaccaaagg agatctaaat 120  
cattcacctg atgagtccgt gaggacgaaa ctttagcaaa ccaagg 166

<210> 9  
<211> 378  
<212> DNA

<213> *E. coli*

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aaattatcca ctgatgagtc cgtgaggacg aaacgggcga aaagatctag atctaaatcg 120
ttacctgatg agtcctgag gacgaaacta ccgaaaagat ctaatctaaa tgatgttctg 180
atgagtcctg gaggacgaaa cacttaaaa gatctagatc taaattttcc actgatgagt 240
ccgtgaggac gaaacgtgca aaaagatcta gatctaattg atacctgat gagtccgtga 300
ggacgaaaca gtcagaaaag atctagatct aaattcggtt ctgatgagtc cgtgaggacg 360
aaacaccaca aaagatct 378
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<210> 10

<211> 162

<212> DNA

<213> *E. coli*

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aaaggcatca ctgatgagtc cgtgaggacg aaactgttaa aaccaaggag atctaaacca 120
catcctgatg agtcctgag gacgaaacag tttaaacc aa gg 162
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<210> 11

<211> 162

<212> DNA

<213> *E. coli*

<400> 11

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agatctaaaa gagcgctgat gagtccgtga ggacgaaaca gtcaaaacca aggagatcta 60
aatttcgatc tgatgagtc gtgaggacga aaccagctaa accaaggaga tctaaacgat 120
ttcctgatga gtccgtgag acgaaacatc accaaacc aa gg 162
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<210> 12

<211> 56

<212> DNA

<213> *E. coli*

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agatctaaat gcgtctgatg agtcctgag gacgaaacag gcaggtaaaa ccaagg 56
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<210> 13

<211> 157

<212> DNA

<213> *Streptomyces lividans*

<400> 13

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aagggcgctg atgagtcctg gaggacgaaa cgcgaaaacc aaggagatct aaagtactcc 120
tgatgagtc gtgaggacga aaccagcgaa accaagg 157
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<210> 14

<211> 168

<212> DNA

<213> *Enterococcus faecalis*

<400> 14

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ctaaagttta ataactgatg agtcctgag gacgaaactt gttcaaacca aggagatcta 120
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aaacttttgc tgatgagtcc gtgaggacga aacgtgtata aaccaagg 168

<210> 15

<211> 162

<212> DNA

<213> *Pseudomonas putida*

<400> 15

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aaacaggttc ctgatgagtc cgtgaggacg aaacaatgta aaccaaggag atctaaatcg 120  
ctttctgatg agtcctgag gacgaaacgt gataaaccaa gg 162

<210> 16

<211> 160

<212> DNA

<213> *Streptomyces coelicolor*

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aaacgagtc tgatgagtc gtgaggacga aaccgggaaa ccaaggagat ctaaagtcga 120  
tgctgatgag tccgtgagga cgaaacttcg caaaccaagg 160

<210> 17

<211> 56

<212> DNA

<213> *Staphylococcus warneri*

<400> 17

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<210> 18

<211> 38

<212> DNA

<213> Artificial Sequence

<220>

<223> B2 consensus

<400> 18

tgctcttctg atgagtcctg gaggacgaaa ccgcctga 38

<210> 19

<211> 39

<212> DNA

<213> *Mus musculus*

<400> 19

ttcaaagact gatgagtcctg tgaggacgaa acgaggatc 39

<210> 20

<211> 34

<212> DNA

<213> *Mus musculus*

<400> 20

gtccatctga tgagtcctg aggacgaaac cggc 34



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 <211> 36  
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 <211> 37  
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 <400> 26  
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 <213> Mus musculus  
  
 <400> 27  
 tcgaagctgt ctgatgagtc cgtgaggacg aaaccgcgtt ga 42  
  
 <210> 28

<211> 37  
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 <213> Rattus norvegicus  
  
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 tgaa 64  
  
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<212> DNA

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<210> 47

<211> 63

<212> DNA

<213> Artificial Sequence

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<223> ribozyme construct

<400> 47

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ttg 63

<210> 48

<211> 64

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<213> Artificial Sequence

<220>

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<221> modified\_base

<222> (1)...(281)

<223> n=a, c, g, or u

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guuccaggga uccnnnnnnc ugaugagucc gugaggacga aannnnnnnn nggaauucca 180
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<210> 51

<211> 364

<212> DNA

<213> Artificial Sequence

<220>

<223> pSnip ribozyme cassette

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aggacgaaac ggatctgcag cggatatcca gctttggaac cctgatgagt ccgtgaggac 180
gaaacgatga cattctgctg accagattca cggtcagcag aatgtcatcg tcggttccag 240
gatccttgcc tgaattccaa gggctctgcgc aacgacgacg atgaggtacc acatcgctcg 300
cggttgcgcac tgatgaggcc gtgaggccga aacccttgac gcgttcctat gcggccgctc 360
taga 364
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<210> 52

<211> 686

<212> DNA

<213> Artificial Sequence

<220>

<223> modified pChop cassette

<400> 52

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acgatgacat tctgctgacc agattcacgg tcagcagaat gtcacgtcg gttccaggat 180
ccggctgcta acaaagcccg aaaggaagct gaggttggctg ctgccaccgc tgagcaataa 240
ctagcataac cccttggggc ctctaaacgg gtcttgaggg gttttttgct gaaaggagga 300
actatatccg gatatcccgc aagaggcccg gcagtaccgg cataaccaag cctatgccta 360
cagcatccag ggtgacggtg ccgaggatga cgatgagcgc attgttagat ttcatacacg 420
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caucgucguc guugcgca 18